REMARKS

Reconsideration of the above-identified patent application in view of the amendment above and the remarks below is respectfully requested.

Claims 4, 15 and 21 have been canceled in this paper. Claims 1, 5, 7, 16, 17, 22, 24 and 58 have been amended in this paper. No new claims have been added in this paper. Therefore, claims 1, 5-9, 11-14, 16-18, 22-26, 28-31 and 58 are pending and are under active consideration.

Claims 1, 4-9, 11-17 and 56-58 stand rejected under 35 U.S.C. 103(a) "as being unpatentable over Applicant's admitted prior art in view of McCurry et al. (US 6391415), generally for the reasons set forth in section 5 of Office action dated 8/19/2004, together with the following additional response to argument." In support of the rejection, the Patent Office states the following:

> First, for independent claims 1 and 16, it is noted that the term "comprising", at line 2 of each claim, has been changed to "consisting of". The Examiner notes that the amendments clearly change the scope of claims 1 and 16.
>
> Second, the Examiner repeats (see Office action dated 10/29/2003, pages 3-5) the relied upon prior art as follows: In the Background of the Invention, Applicant has admitted that most of the elements of the instantly claimed invention of a label assembly are known art (Specification, pages 1-5). Specifically, it is known art that heat-transfer labels are typically constructed as part of a heat-transfer label assembly, with one or more heat-transfer labels printed on a removable carrier web (page 1, third paragraph). Kingston teaches that a wax release layer can be affixed to the paper sheet, and an ink design layer is printed on the wax release layer (page 1, bottom paragraph). Parker teaches that the paper carrier web can be overcoated with a release layer of thermoplastic polyethylene; the ink design layer comprises a resinous binder selected from the group consisting of polyvinylchlroide, acrylics, polyamides and nitrocellulose (page 3, top paragraph). Laprade teaches an improvement over Parker by adding a skim coat of carnauba wax is interposed between the polyethylene release layer and the protective lacquer layer to improve the release of the protective lacquer from the polyethylene-coated carrier web; Laprade also teaches that the ink

layer comprises a design printed with a comprising a phenoxy resin (i.e., binder), silica and a colorant (page 4, top paragraph). Although Applicant's admitted prior art lacks express teachings of the amount of crosslinking resin and ink design layers being thermosetting within about 1-2 minutes at 250-325°F, it is noted that McCurry's invention is directed to a heat-transfer label, and McCurry expressly teaches that a heat-activated, cross-linking agent may be added in at least one of the color coat and the protective, clear coat to improve water soak resistance; the heat-activated, cross-linking agent preferably is selected from the group consisting of urea and melamine formaldehyde, which has an activation temperature of greater than about 250°F, and preferably about 380°F (column 3, lines 8-18; column 8, lines 65-67). Additionally, the Examiner notes that the prior statement that "it is common knowledge that crosslinked melamine formaldehyde is inherently a thermoset polymer" is now taken as admitted prior art, because Applicant failed to specifically point out any supposed error in Examiner's position in prior responses. Regarding McCurry's silence about the amount of melamine formaldehyde and time required for thermosetting, it is noted that since the scope of McCurry's heat-transfer process is essentially the same as the instantly claimed invention, it is believed that a suitable amount of melamine formaldehyde and time for thermosetting are either inherently disclosed, and obvious optimizations, motivated by the desire to thermoset ink design layer timely. As such, it would have been obvious to one of ordinary skill in the art to modify Applicant's admitted prior art to incorporate McCurry's melamine formaldehyde into the ink design layers, motivated by the desire to improve the water soak resistance of the label.

With respect to the brief review of the prior art by Applicant (Remarks, pages 9-10), and Applicant's argument [that] "the Patent Office is apparently contending that it would have been obvious to modify the Kingston label assembly by replacing Kingston design 12 with McCurry color coat layer 22...the Patent Office has failed to give due weight to the stark and fundamental differences between the two types of label assemblies involved...the Kingston label assembly effects label transfer by virtue of a wax transfer layer that melts and splits when heated, the McCurry label effects label transfer by virtue of a silicone release finish 16 that remains with the carrier. Nowhere in McCurry is any mention made of using a wax layer as a mechanism for effecting label transfer" (Remarks, page 11, second paragraph), the Examiner respectfully reminds Applicant that the admitted prior art by Laprade teaches an improved release coating by

adding a skim coat of carnauba wax between the polyethylene release layer of the carrier and the protective lacquer layer to improve the release of the protective lacquer from the polyethylene-coated carrier web, as set forth above. As such it would have been obvious to one of ordinary skill in the art to substitute Kingston's wax release layer with the wax skim coat and carrier web of Laprade, motivated by the desire to obtain an improved release process.

With respect to Applicant's argument "McCurry label assembly has a transfer portion that, at a minimum, requires both color coat layer 22 and protective clear coat layer 20" (Remarks, page 11, second paragraph, last four lines), the Examiner notes that Applicant clearly argues the cited references individually. In response to Applicant's arguments, it is asserted that one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. In particular, the Examiner repeats (see Office action dated 8/19/2004, pages 3-4) that Applicant has admitted that the prior art Kingston teaches that an ink design layer is printed on the wax release layer (which can be obviously improved with a wax skim coat, as set forth above)(see specification, page 1, bottom paragraph). Further, the cited reference by Kingston (US 3616015) also expressly shows in Fig. 1 that an ink design layer is deposited directly on the wax layer. As such, it is the Examiner's position that the combined teachings (Kingston and Laprade) of Applicant's admitted prior art clearly teach the heat transfer assembly of instant invention as claimed, and Applicant's argument against McCurry individually for having a protective layer between the color coat layer (ink design layer) and a release coating (wax skim coat) is not persuasive.

With respect to Applicant's argument [that] "The function of a wax skim coat is principally to improve the release between a label and its carrier and is not to provide protection to the underlying design or to adhere the underlying design to a substrate. In fact, because a wax skim coat is inadequate for such protective and/or adhesive purposes, label assemblies that include a wax skim coat also include one or both of a protective lacquer layer that is disposed over the transferred ink design...one of ordinary skill in the art would not have regarded the Kingston wax transfer layer as equivalent to or interchangeable with a wax skim coat - without also including in the label a protective layer and/or an adhesive layer." (Remarks, pages 12-13, bridging paragraph), the Examiner respectfully notes that the Applicant appears to have misinterpreted the meaning and function of the "protective coat". It should be noted that before the transfer,

the surface of the ink design layer is adjacent to the carrier web, i.e., it is not an exposed outer layer, so there is no need to "protect" it. Only after the label is transferred, then it becomes an outer layer, and the durability of the ink design layer could be improved by a "protective coat". As such, Applicant's argument "a wax skim coat is inadequate for such protective and/or adhesive purposes" appears to be erroneous, because there is no requirement for a wax skim layer to provide "protection". Additionally, Applicant fails to provide any evidentiary support that the use of a wax skim would have also requried a protective layer, and it is well settled that Attorney arguments cannot take the place of evidence. Finally, the Examiner notes that Applicant's argument also appears to be arguing against the instantly claimed invention as not enabling.

With respect to Applicant's argument "Nowhere in McCurry is the use of a heat-activatable catalyst disclosed or suggested. The Patent Office has no basis for assuming that a heat-activatable catalyst is present for the lower range of activation temperatures since there are other factors (e.g., choice of cross-linker and/or other components of the layer) that may impact activation temperature. Moreover, as noted previously, McCurry specifically teaches away from lower activation temperatures." (Remarks, page 13, second full paragraph), the Examiner notes that the prior statement (see Office action dated 3/2/2004) "Since McCurry's typical activation temperature of the adhesive is at 120°F-220°F, and it is conventional and well known a catalyst can be used to shorten the reaction time, it is believed that including a suitable catalyst in the ink design layer to lower the activation temperature for crosslinking is either implicitly disclosed by McCurry, or an obvious optimization to one of ordinary skill in the art of crosslinking, motivated by the desire to increase the production efficiency by shorten the processing time" is now taken as admitted prior art, because Applicant fails to adequately traverse the Examiner's position. In particular, the Examiner repeats that McCurry expressly teaches that the purpose of initial processing temperature at 120°F-220°F is to "allow the adhesive to be activated at a first, lower temperature and crosslinking agent to be *activated (i.e., implicitly that a temperature-specific catalyst is included)* at a second, higher temperature after the label has been transferred to the substrate" (column 3, lines 19-22). Further, McCurry also teaches that "because of the mechanics of transferring a label, the heat-activated, crosslinking agent may have an *activation* temperature *down to equal or about equal to the activation temperature of the adhesive* and still perform satisfactory"(column 3, lines 22-26). In other words, McCurry does teach lower activation temperatures for

> the ink design layer, Applicant's argument to the contrary notwithstanding. Finally, with respect to Applicant's aforementioned argument "...other factors (e.g., choice of cross-linker and/or other components of the layer) that may impact activation temperature", the Examiner notes that the "other factors" appear to be irrelevant to McCurry's express teaching of proper selection of a temperature-specific activation of the crosslinking of the ink design layer. In particular, Applicant fails to provide any evidentiary support that how the "choice of cross-linker and/or other components of the layer" will preclude McCurry's teachings.

Insofar as the subject rejection pertains to claims 4, 15 and 56-57, Applicant respectfully submits that the rejection is moot in view of Applicant's cancellation herein of claims 4 and 15 and Applicant's previous cancellation of claims 56-57. Insofar as the subject rejection pertains to claims 1, 5-9, 11-14, 16-18 and 58, Applicant respectfully traverses the rejection.

As pointed out in MPEP 2143, in order for the Patent Office to carry its burden of proving a *prima facie* case of obviousness, three basic criteria must be met: First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. For at least the reasons provided below, Applicant respectfully contends that the Patent Office has failed to satisfy the three criteria above and, therefore, has failed to make a *prima facie* case of obviousness.

First, with respect to the issue of a suggestion or motivation to combine references, the Patent Office has provided no explanation as to why one of ordinary skill in the art would have been **motivated** to combine the references in the manner proposed by the Patent Office. Instead, the Patent Office is apparently operating under the assumption that it is permissible to "mix and match" different elements of various types of heat-transfer labels, without regard for whether such a

rearrangement of the prior art would have been **suggested** to one of ordinary skill in the art. For example, the Patent Office states in the second paragraph of the instant rejection "the Examiner repeats (see Office action dated 10/29/2003, pages 3-5) the relied upon prior art as follows: In the Background of the Invention, Applicant has admitted that most of the elements of the instantly claimed invention of a label assembly are known art (Specification, pages 1-5)." The Patent Office then goes on to discuss certain elements of Kingston, Parker and Laprade, the Patent Office implicitly contending that the mere disclosure of these three references somehow constitutes an admission by Applicant that the individual elements of these references may be rearranged in some manner to arrive at a new combination of elements. Such a position by the Patent Office represents a clear misapplication of the law. Contrary to the Patent Office's assertion, Applicant has not admitted that "most of the elements of the instantly claimed invention of a label assembly are known art" nor has Applicant admitted that any modification or combination of Kingston, Parker and/or Laprade is obvious or constitutes prior art. In fact, the principal reason for Applicant providing a review of the art in the previous Amendment was to point out the differences among different types of heat-transfer label assemblies so that it would be apparent why one of ordinary skill in the art would **not** have been **motivated** to "pick and choose" components from different heat-transfer label assemblies in the manner proposed by the Patent Office. Applicant briefly reviews these differences below to illustrate the impropriety of combining the references in the manner proposed by the Patent Office.

Kingston teaches a heat-transfer label assembly consisting of a paper backing 10, a wax transfer layer 11 coated onto paper backing 10, and a design 12 printed onto the exposed surface of wax transfer layer 11. Design 12 is transferred from backing 10 to a receiving surface by rolling

pressure from a heated surface at a temperature between about 250-600°F, for example 350°F. In effecting transfer, a portion of wax transfer layer 11 transfers with design 12. The transferred portion of wax transfer layer 11 tends to be uneven and cloudy, detracting from the attractiveness of the transferred image. Consequently, to improve the appearance of the transfer and to clarify the wax, the transferred wax is exposed to jets of hot gas for a period of time to re-melt the wax.

The heat-transfer label assembly of Kingston differs from the heat-transfer label assembly of claims 1 and 58 in that (i) whereas the carrier of Kingston is made of paper, the claimed carrier consists of a paper substrate overcoated with a layer of polyethylene; (ii) whereas Kingston has a thick, wax transfer layer, which must be re-melted after label transfer, the claimed assembly has a thin, wax skim coat, which does not require re-melting after label transfer; and (iii) whereas Kingston does not teach or suggest an ink design layer that is thermosetting and includes a cross-linking system, the claimed ink design layer is thermosetting and comprises a cross-linking system, said cross-linking system comprising (or, in the case of claim 58, consisting of) (a) a cross-linking resin for cross-linking said binder and (b) a heat-activatable catalyst for catalyzing said cross-linking within about 1-2 minutes after said ink design layer has been transferred to an article heated to a temperature of about 250°F-325°F.

The heat-transfer label assembly of Kingston differs from the heat-transfer label assembly of claim 16 in that (i) whereas the carrier of Kingston is made of paper, the claimed carrier consists of a polymeric film overcoated with a release coating made of a non-wax, non-silicone, thermoset release material; (ii) whereas Kingston has a thick wax transfer layer, the claimed assembly has no wax layer at all; and (iii) whereas Kingston does not teach or suggest an ink design layer that is thermosetting and includes a cross-linking system, the claimed ink design layer is thermosetting and

comprises a cross-linking system, said cross-linking system comprising (a) a cross-linking resin for cross-linking said binder and (b) a heat-activatable catalyst for catalyzing said cross-linking within about 1-2 minutes after said ink design layer has been transferred to an article heated to a temperature of about 250°F-325°F.

Laprade teaches a heat-transfer label assembly that includes (a) a support portion in the form of a sheet of paper overcoated with a release layer of polyethyelene, (b) a skim coat of wax overcoated onto the polyethylene release layer and (c) a transfer portion, the transfer portion including a protective lacquer layer printed onto the wax skim coat, an ink layer printed onto the protective lacquer layer, and an adhesive layer printed onto the ink layer, as well as onto any exposed portions of the underlying protective lacquer layer and onto a surrounding area of the skim coat. Decoration of an article with the skim-coat containing label is typically performed by applying heat to the bottom of the support portion while the adhesive layer is pressed against the article. Once the transfer portion has been applied to the article, the labeled article is then typically subjected to a post-heating step so that the protective lacquer layer and/or the adhesive layer, one or both of which typically comprise thermosetting resins, may be cured. (The ink layer of the above-described heat-transfer label assembly does not include a thermosetting resin, but rather, consists of a phenoxy resin, a silica and a colorant.) Said post-heating step is typically performed by conveying the labeled articles through one or more industrial ovens to heat the articles to an elevated temperature, such as 400°F, for a particular amount of time, typically 15-20 minutes.

The heat-transfer label assembly of Laprade differs from the heat-transfer label assembly of claims 1 and 58 in that (i) whereas the Laprade assembly comprises a transfer portion that includes the combination of a protective lacquer layer printed onto the wax skim coat, an ink layer printed

onto the protective lacquer layer, and an adhesive layer printed onto the ink layer, as well as onto any exposed portions of the underlying protective lacquer layer and onto a surrounding area of the skim coat, **the claimed assembly does not include a protective lacquer layer or an adhesive layer, but rather, consists of one or more ink design layers**; and (ii) whereas the Laprade ink design layer is not thermosetting and does not include a cross-linking system, the claimed ink design layer is thermosetting and comprises a cross-linking system, said cross-linking system comprising (or, in the case of claim 58, consisting of) (a) a cross-linking resin for cross-linking said binder and (b) a heat-activatable catalyst for catalyzing said cross-linking within about 1-2 minutes after said ink design layer has been transferred to an article heated to a temperature of about 250°F-325°F.

The heat-transfer label assembly of Laprade differs from the heat-transfer label assembly of claim 16 in that (i) whereas the carrier of Laprade is made of paper, the claimed carrier consists of a polymeric film overcoated with a release coating made of a non-wax, non-silicone, thermoset release material; (ii) whereas Laprade has a thick wax transfer layer, the claimed assembly has no wax layer at all; and (iii) whereas the Laprade ink design layer is not thermosetting and does not include a cross-linking system, the claimed ink design layer is thermosetting and comprises a cross-linking system, said cross-linking system comprising (or, in the case of claim 58, consisting of) (a) a cross-linking resin for cross-linking said binder and (b) a heat-activatable catalyst for catalyzing said cross-linking within about 1-2 minutes after said ink design layer has been transferred to an article heated to a temperature of about 250°F-325°F.

McCurry et al. teaches a heat-transfer label assembly, the McCurry assembly comprising a label carrier 14, which may be paper or extruded plastic film, such as polypropylene or polyester. A release finish 16, preferably of silicone, may be applied to the top surface of label carrier 14 for

aiding in the transfer of the label to the substrate. A clear release coating 18 may be applied to the top of the release finish 16 to provide additional protection for the label after transfer. A protective clear coat layer 20, which includes a carboxylic acid functional resin and the balance water, is applied to the clear release coating 18. Hydrophobic fumed silica may be added to protective clear coat layer 20. A color coat layer 22, which includes a carboxylic acid functional resin, a hard solution, a soft emulsion, a colloidal dispersion and the balance water, is applied to the protective clear coat layer 20. A heat-activated cross-linking agent may be added to one or both of protective clear coat layer 20 and color coat layer 22 for improved water soak resistance. Preferably, the cross-linking agent has an activation temperature greater than the transfer temperature of the labeler to prevent cross-linking from occurring during normal label transfer. A heat-activated adhesive 26 is used to transfer the label from the label carrier to a substrate 12. A clear primer coat 24 may be added between adhesive 26 and color coat layer 22.

The heat-transfer label assembly of McCurry differs from the heat-transfer label assembly of claims 1 and 58 in that (i) whereas the McCurry carrier is paper or extruded plastic film, the claimed carrier consists of paper overcoated with polyethylene; (ii) whereas the McCurry assembly has a silicone release finish applied to its carrier, the claimed assembly requires that a skim coat of wax be deposited onto its carrier; (iii) whereas the McCurry assembly requires, **at a minimum**, that the transferred label include a protective clear coat layer **and** a color coat layer, the protective clear coat layer being interposed between the color coat layer and the release finish, the claimed assembly requires that the label **consist** of one or more ink design layers **in direct contact** with the wax skim coat; and (iv) whereas McCurry teaches that a heat-activated, cross-linking agent may be included in the color coat layer, McCurry does not teach or suggest the claimed heat-activatable catalyst for

catalyzing cross-linking within about 1-2 minutes after the ink design layer has been transferred to an article heated to a temperature of about 250°F-325°F.

The heat-transfer label assembly of McCurry differs from the heat-transfer label assembly of claim 16 in that (i) whereas the McCurry carrier is paper or extruded plastic film, the claimed carrier consists of a polymeric film overcoated with a release coating made of a non-wax, non-silicone, thermoset release material; (ii) whereas the McCurry assembly has a silicone release finish applied to its carrier, the claimed assembly requires that the ink design layer being in direct contact with the carrier; (iii) whereas the McCurry assembly requires, **at a minimum**, that the transferred label include a protective clear coat layer and a color coat layer, the protective clear coat layer being interposed between the color coat layer and the release finish, the claimed assembly requires that the label **consist** of one or more ink design layers **in direct contact** with the carrier; and (iv) whereas McCurry teaches that a heat-activated, cross-linking agent may be included in the color coat layer, McCurry does not teach or suggest the claimed heat-activatable catalyst for catalyzing cross-linking within about 1-2 minutes after the ink design layer has been transferred to an article heated to a temperature of about 250°F-325°F.

The Patent Office apparently recognizes at least some of the above deficiencies of Kingston, Laprade and McCurry, when viewed individually, as compared to the claimed invention. Nevertheless, despite the deficiencies of these individual references, the Patent Office is apparently contending that it would have been obvious to combine the teachings of Kingston, Laprade and McCurry so that (i) the paper carrier and the thick, wax transfer layer of Kingston are replaced with the polyethylene-coated paper and the thin, wax skim coat, respectively, of Laprade and (ii) the ink design layer of Kingston is replaced with the color coat layer of McCurry. However, for at least the

reasons given below, Applicants respectfully submit that there would have been no **motivation** for one of ordinary skill in the art to have made the modifications proposed by the Patent Office.

First, with respect to the proposed replacement of the Kingston carrier 10 and the Kingston wax transfer layer 11 with the Laprade carrier 13 and the Laprade wax skim coat 19, respectively, it should be apparent from a review of Kingston and Laprade that the **Kingston wax transfer layer and the Laprade wax skim coat, while both containing wax, have decidedly different functions and, therefore, would not have been considered interchangeable by one of ordinary skill in the art for use with the Kingston ink design layer**. This is, in part, because the Kingston wax transfer layer is designed to be sufficiently thick to provide **protection** to the Kingston ink design layer **after label transfer** whereas the Laprade skim coat layer is intended solely to facilitate **release** of the combination of protective lacquer layer/ink design layer/adhesive layer from the carrier during label transfer. The fact that the Laprade wax skim coat layer is intended solely to facilitate release and not to protect the transferred label should be apparent from Laprade, itself, which explains the origins of the skim coat layer and should be apparent from the fact that the Laprade label includes a protective lacquer layer for protecting the ink design layer after label transfer. In response to the Patent Office's comments in the paragraph bridging pages 6 and 7 of the outstanding Office Action, Applicant notes that all of the art of record relating to heat-transfer labels of the skim coat-containing variety disclose a protective layer interposed between the wax skim coat and the ink design layer so that, after label transfer, the protective layer protects the ink design layer. Moreover, Laprade, itself, at col. 1, lines 42-45, teaches that the Kingston wax layer serves "two purposes: (1) to provide release...and (2) to form a protective layer over the transferred ink design." Consequently, in view of the above, one of ordinary skill in the art at the time of the invention would not have been

motivated to use a wax skim coat in a label assembly having a Kingston ink design layer **without also positioning a protective layer between the wax skim coat and the ink design layer**.

To the extent that the Patent Office argues at the top of page 7 of the outstanding Office Action that the above argument somehow "[argues] against the instantly claimed invention as not enabling," Applicant respectfully disagrees. Applicant's arguments show why one of ordinary skill in the art at the time of the invention would not have been **motivated** to combine the Laprade carrier and skim coat with the Kingston ink design layer. Applicant has not commented on whether or not such a combination would be operative; instead, all that Applicant has argued is that one of ordinary skill in the art at the time of the invention would not have been motivated to make the combination in view of the teachings of the art. In any event, whether the proposed combination of Laprade and Kingston is, in fact, operable is irrelevant since the claimed invention uses an ink design layer that is neither taught nor suggested by Laprade and/or Kingston.

With respect to the proposed replacement of the Kingston ink design layer 12 with the McCurry color coat layer 22, it should be apparent from a review of McCurry that McCurry regards both protective clear coat layer 20 and color coat layer 22 **as indispensable components of a unitary water reducible ink system**. For example, McCurry states at col. 1, lines 5-9, that "[t]he present invention relates...more particularly, to a heat activated label system for transferring a preprinted label and a protective coating in a single step from label stock to a substrate, such as a plastic crate or glass bottle," at col. 2, lines 18-20, that "there remains a need for a new and improved heat activated label system for transferring a preprinted label and a protective clear coat in a single step...," and at col. 3, lines 32-35 that "[a]nother aspect of the present invention is to provide a water reducible ink system, the system including: (a) a color coat layer comprised of a first

carboxylic acid functional resin; and (b) a protective, clear coat layer." **Therefore, because color coat layer 22 and protective clear coat layer 20 together constitute the McCurry ink system, one of ordinary skill in the art would not have been motivated to use McCurry color coat layer 22 without also using McCurry protective clear coat layer 20.**

Moreover, as Applicant has noted previously, the Kingston label assembly and the McCurry label assembly are fundamentally different types of label assemblies, the Kingston label assembly effecting label transfer by virtue of a wax transfer layer that melts and splits when heated, the McCurry label assembly effecting label transfer by virtue of a silicone release finish 16 that remains with the carrier. **The Patent Office has failed to explain why, in view of these differences, one of ordinary skill in the art would have regarded Kingston ink design 12 and McCurry color coat layer 22 as interchangeable and would have been motivated to replace Kingston ink design 12 with McCurry color coat layer 22.** The Patent Office appears to be assuming that, if, in hindsight, a modification **could have been performed**, it follows logically that there **would have been motivation** for making such a modification. This is not a correct application of the law of obviousness.

In view of the above, it should be apparent that there would have been no motivation for a person of ordinary skill in the art at the time of the invention (i) to have replaced the paper carrier and the thick, wax transfer layer of Kingston with the polyethylene-coated paper and the thin, wax skim coat, respectively, of Laprade and (ii) to have replaced the ink design layer of Kingston with the color coat layer of McCurry. Consequently, in the absence of such a motivation, there also could not have been a reasonable expectation of success. Furthermore, as explained further below, the applied references, even if combined, do not teach or suggest all of the claim limitations.

For instance, with respect to all of the claims of the subject rejection, even if one were to replace Kingston ink design layer 12 with McCurry color coat layer 22, the resulting assembly would still not teach or suggest (i) the claimed polyester resinous binder of the ink design layer or (ii) the claimed heat-activatable catalyst for catalyzing cross-linking within about 1-2 minutes after the ink design layer has been transferred to an article heated to a temperature of about 250°F-325°F.

More specifically, with respect to the claimed polyester resinous binder, McCurry does not teach or suggest a polyester resinous binder, but rather, teaches that its color coat layer 22 comprises a carboxylic acid functional resin selected from the group consisting of urethane, epoxy and acrylic carboxylic acid functional resins.

With respect to the claimed heat-activatable catalyst, while McCurry does suggest adding a heat-activated, cross-linking agent, such as melamine formaldehyde, to color coat layer 22, McCurry fails to teach or suggest also adding a **heat-activatable catalyst** to catalyze cross-linking of said cross-linking agent. In fact, if anything, McCurry **teaches away** from adding a heat-activatable catalyst to its cross-linking agent as McCurry teaches that it is preferable that cross-linking be **prevented** at the lower temperatures that occur **during** label transfer. This is illustrated by the following passage at col. 4, line 60 through col. 5, line 1, of McCurry:

> As can be appreciated, the heat-activated, cross-linking agent has an activation temperature greater than the transfer temperature of the labeler and preferably greater than 250°F. In the most preferred embodiment, the heat-activated, cross-linking agent has an activation temperature of about 380°F. This prevents cross-linking from occurring during normal label transfer which occurs at a lower temperature, as will be described in more detail below.

The only statement that the Patent Office has found to support its position that McCurry teaches the addition of a catalyst to its cross-linking agent is the following statement at col. 5, lines 1-5:

> However, because of the mechanics of transferring a label, the heat-activated, cross-linking agent may have an activation temperature down to about equal to the activation temperature of the adhesive and still perform satisfactory.

Applicant respectfully submits that, in view of the fact that McCurry explicitly teaches that it is **preferable** for cross-linking to be **prevented during** label transfer, one of ordinary skill in the art would not have been motivated, based on the passage above, to add a catalyst to the cross-linking agent to reduce the activation temperature at which cross-linking occurs since this would have the **exact opposite result**. Put in its proper context, all that the above passage conveys is that an activation temperature of the cross-linking agent that is down to about equal to the activation temperature of the adhesive is not detrimental. This is not the same as suggesting that the activation temperature at which cross-linking occurs should be modified in some way.

Moreover, in response to the Patent Office's comments in the paragraph bridging pages 7-8 of the outstanding Office Action, the Patent Office has apparently disregarded the fact that McCurry teaches at col. 5, lines 25-42, that the adhesive is activated upon contact with the substrate (which has been heated to between about 120°F and 220°F) but that **the cross-linking agent is not activated until after label transfer when the substrate is then heated to about 380°F**. Statements by the Patent Office, such as "it is believed that including a suitable catalyst in the ink design layer to lower the activation temperature for crosslinking is either implicity disclosed by McCurry, or an obvious optimization to one of ordinary skill in the art of crosslinking, motivated by the desire to increase the production efficiency by shortening the processing time," fail to take

into account that McCurry expresses a clear preference that the activation temperature for crosslinking be **higher** than that experienced during label transfer. Lastly, Applicant notes that McCurry unambiguously teaches at col. 6, lines 10-17, the composition of color coat 22 and how color coat 22 is prepared. The disclosed composition does not include any type of catalyst, and there is no discussion that makes mention of the possibility of adding the claimed catalyst to the composition.

Claim 58 is further distinguishable over the applied combination of references for the reason that the references do not teach or suggest that the ink design layer comprise the combination of a copolyester resinous binder and a vinyl chloride/vinyl acetate resinous binder.

Finally, with respect to claims 16-17, none of the applied references teach or suggest a carrier consisting of a polymeric film overcoated with a release coating made of a non-wax, non-silicone, thermoset release material.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

Claims 16-18, 21-26 and 28-31 stand rejected under 35 U.S.C. 103(a) "as being unpatentable over Applicant's admitted prior art in view of McCurry et al. (US 6391415), and further in view of Bilodeau et al. (US 6376069), generally for the reasons set forth in section 5 of Office action dated 8/19/2004[1], together with the following additional response to argument." In support of the rejection, the Patent Office states the following:

> First, the Examiner repeats (see Office action dated 10/29/2003, page 6) the relied upon prior art Bilodeau as follows: Bilodeau's invention is directed to a heat transfer label including a non-wax, non-silicone release layer for use in decorating an article

---

[1] Applicant does not understand the reference to the Office Action dated August 19, 2004, since Bilodeau et al. is not discussed in said Office Action.

without leaving a visually discernible release residue on the decorated article (Abstract). Bilodeau expressly teaches that the release layer comprises crosslinking monomer and functionalized alkyl monomer containing epoxidized α-olefin (column 10, lines 8-59). Bilodeau also teaches that plastic films are sufficiently extensible to enable the selective stretching of various regions (column 9, lines 29-31). Although Bilodeau is silent about the reaction between the releasing layer of Bilodeau et al. (US 6376069) is the same as the instantly claimed invention, in the absence of unexpected results, it is the Examiner's position that the reaction between the releasing layer and the film substrate is either inherent, or obviously provided, once the same composition of the releasing layer is produced or selected. Additionally, the Examiner's prior statement that "amine-blocked sulfonic acid is a conventional and well known catalyst for crosslinking (or thermosetting) melamine formaldehyde in a controlled temperature range" is now taken as admitted prior art, because Applicant failed to specifically point out any supposed error in Examiner's position in prior responses.

With respect to Applicant's argument "with respect to claims 16-18, 21-26, 28-31, one of ordinary skill in the art would not have been motivated to replace the Kingston wax transfer layer with a non-wax carrier as claimed as there would have been no expectation that such a label would perform adequately without also including a protective layer and/or an adhesive layer" (Remarks, page 13, first full paragraph), the Examiner notes that Applicant fails to provide any evidentiary support for the aforementioned argument, and it is well settled that Attorney arguments cannot take the place of evidence. Additionally, the Examiner notes that Applicant's argument also appears to be arguing against the instantly claimed invention as not enabling.

Insofar as the subject rejection pertains to claim 21, the rejection is moot in view of Applicant's cancellation herein of claim 21. Insofar as the subject rejection pertains to claims 16-18, 22-26 and 28-31, Applicant respectfully traverses the subject rejection.

Claim 16, from which claims 17-18, 22-26 and 28-31 depend, is patentable over "Applicant's admitted prior art in view of McCurry et al." for at least the reasons given above. Bilodeau et al.

fails to cure all of the deficiencies of the art applied above to claim 16. Therefore, claims 16-18, 22-26 and 28-31 are patentable over the applied combination of references.

With respect to the Patent Office's comments in the paragraph bridging pages 8-9 of the outstanding Office Action regarding amine-blocked sulfonic acid, Applicant repeats that there is no teaching or suggestion to modify McCurry color coat layer 22 to include a catalyst.

With respect to the Patent Office's comments in the second paragraph of page 9 of the outstanding Office Action regarding the replacement of Kingston paper backing 10 and wax transfer layer 11 with Bilodeau support portion 13, Applicant repeats that there would have been no motivation for one of ordinary skill in the art at the time of the invention to have made the proposed substitution. Bilodeau, itself, teaches at col. 1, lines 36-39, that the wax transfer layer of Kingston not only provides a release of the ink design layer from the web backing **but also forms a protective layer over the transferred ink design**. Consequently, one of ordinary skill in the art at the time of the invention would not have been **motivated** to use the Bilodeau support portion in a label assembly having a Kingston ink design layer **without also positioning a protective layer between the support portion and the ink design layer**.

To the extent that the Patent Office argues that the above argument somehow "[argues] against the instantly claimed invention as not enabling," Applicant respectfully disagrees. Applicant's arguments show why one of ordinary skill in the art at the time of the invention would not have been **motivated** to combine the Bilodeau support portion with the Kingston ink design layer. Applicant has not commented on whether or not such a combination would be operative; instead, all that Applicant has argued is that one of ordinary skill in the art at the time of the invention would not have been **motivated** to make the combination in view of the teachings of the

art. In any event, whether the proposed combination of Bilodeau and Kingston is, in fact, operable is irrelevant since the claimed invention uses an ink design layer that is neither taught nor suggested by Bilodeau and/or Kingston.

Accordingly, for at least the above reasons, the subject rejection should be withdrawn.

In conclusion, it is respectfully submitted that the present application is in condition for allowance. Prompt and favorable action is earnestly solicited.

If there are any fees due in connection with the filing of this paper that are not accounted for, the Examiner is authorized to charge the fees to our Deposit Account No. 11-1755. If a fee is required for an extension of time under 37 C.F.R. 1.136 that is not accounted for already, such an extension of time is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

Kriegsman & Kriegsman

By: _____

Edward M. Kriegsman
Reg. No. 33,529
665 Franklin Street
Framingham, MA 01702
(508) 879-3500

Dated: May 31, 2005

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 31, 2005.

_____

Edward M. Kriegsman
Reg. No. 33,529
Dated: May 31, 2005